

DETAILED ACTION

1. After conducting a pre-appeal conference, it was decided to re-open prosecution of this application.
2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 4 and 6-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Nance in view of Padgett et al.

Nance discloses fire fighting helicopter comprising: a fuselage 12 having a reservoir 14 holding fire fighting liquid under pressure and a launcher 16 that dispenses fire fighting liquid and controls the quantity of the liquid dispensed. Nance does not disclose a restriction plate as recited. Padgett et al. teaches a fire fighting system comprising a reservoir 12 storing fire fighting material; a restriction plate (including parts 26, 60, and 68) creating a leak-tight seal and being vertically mobile between stable guides within the reservoir such that the plate decreases or increases the total volume available to be occupied by the fire fighting material in the reservoir; an electric motor 58 for controlling the rise and fall of the plate in which the walls of the reservoir 12 acts as stable guides. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Nance by providing a fluid-tight restriction plate controlled by an electric motor to push out the fire fighting material as

has been taught by Padgett et al. Movement of the plate will alter the amount of material in the reservoir and will thus restrict movement of the material's center of gravity, in which the material can be a liquid. Since Padgett et al. teach that part 68 is a screw, the use of worm screws would have been a matter of design choice since such the device would still carry out its intended functions with such a modification and

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nance in view of Padgett et al. as applied to claim 4 above, and further in view of Tomlinson. Tomlinson teaches a fire fighting helicopter comprising a lower space 20 having sufficient space to receive an operator to operate and control the direction of a launcher. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Nance and Padgett et al. by providing a lower space to receive an operator as taught by Tomlinson. The lower space being a lower deck of the helicopter and making the space so that the operator can be in a lying position would have been matters of design choice since the device will still carry out its intended functions with such modifications.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis Hwu whose telephone number is (571)272-4904. The examiner can normally be reached on Mon-Friday 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval

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/Davis Hwu/
Primary Examiner, Art Unit 3752